



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/742,432

12/22/2000

Hideo Takiguchi

35.C15004

8880

5514

7590

05/21/2004

FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

TABATABAI, ABOLFAZL

ART UNIT

PAPER NUMBER

2625

DATE MAILED: 05/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/742,432

Applicant(s)

TAKIGUCHI, HIDEO

Examiner

Abolfazl Tabatabai

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-17 is/are allowed.
- 6) ☐ Claim(s) 1-8, 18-27, 29 and 30 is/are rejected.
- 7) ☐ Claim(s) 28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

FINAL ACTION

Response to Amendments/Arguments

1. Applicant's arguments, see (pages 11-13), filed February 9, 2004, with respect to the rejection(s) of claims 1-30 under Suzuki et al (U S 6,094,218) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn.

However, upon further consideration, a new ground(s) of rejection is made in view of over Suzuki et al (U S 6,094,218); Sako (U S 6,671,394 B1); Sakaguchi (U S 5,995,201) and Miyaza (U S 5,424,853).

2. Applicant argues in essence that the prior art does not teach or suggest associating a reduced image with a first image, from which the second image was made. Examiner disagrees and indicates that Sako teaches associating means for associating the second image reduced by said reducing means with the first image (column 2, lines 20-30 and column 27, lines 40-52).

3. Applicant argues in essence that the prior art does not teach or suggest adding means for adding specific information to an arbitrary end section of the reduced image. Examiner disagrees and indicates that Sakaguchi teaches adding means for adding specific information to an arbitrary end section of the reduced image (column 13, lines 29-39 and column 24, lines 8-19).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2625

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3, 18, 19, 25, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al (U S 6,094,218) in view of Sako (U S 6,671,394 B1).

Regarding claim 1, Suzuki discloses an image reading system comprising:

image obtaining means for obtaining a second image of a predetermined aspect size ratio from a first image on the basis of an aspect size ratio of said first image (column 10, lines 18-24 and column 11, lines 5-10);

reducing means for reducing the second image obtained by said image obtaining means (column 4, lines 36-50; column 19, lines 3-7 and column 20, lines 1-4).

However, Suzuki is silent about the specific details regarding the step of:

associating means for associating the second image reduced by said reducing means with the first image.

In the same field (image processing) of endeavor, however, Sako discloses an image processing system comprising the step of:

associating means for associating the second image reduced by said reducing means with the first image (column 2, lines 20-30 and column 27, lines 40-52).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the step of associating the second image reduced by said reducing means with the first image as taught by Sako in the system of Suzuki because Sako provides Suzuki an image processing apparatus for reduce image of an original

Art Unit: 2625

image and capable of ensuring speedy processing and cost reduction. Therefore, image processing can be performed at a high speed by a general-purpose central processing unit which the operation can perform image processing job efficiently.

Regarding claim 3, Suzuki discloses an image reading system wherein said image-obtaining means generates an image of the aspect size ratio of the predetermined value as the second image.

Claim 18, is similarly analyzed as claim 1 above.

Regarding claim 19, Suzuki discloses an image processing method which can manage a plurality of images and display a list by using reduced images of said image, comprising:

a generating step of, when a target image (column 22, lines 17-21 of Sakaguchi) is an elongated image whose aspect ratio is larger than a first predetermined value (column 3, lines 4-14 and column 4, lines 36-45), generating a reduced image of an aspect ratio of a second predetermined value from an arbitrary area portion of said target image (column 10, lines 18-24); and,

a display step of displaying the reduced image of the aspect ratio of said second predetermined value generated in said generating step (column 6, lines 37-40 and column 10, lines 18-25).

However, Suzuki is silent about the specific details regarding the step of:

an associating step of associating the second image reduced with the target image.

Art Unit: 2625

In the same field (image processing) of endeavor, however, Sako discloses an image processing system comprising the step of:

an associating step of associating the second image reduced with the target image (column 2, lines 20-30 and column 27, lines 40-52).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the step of associating the second image reduced with the target image as taught by Sako in the system of Suzuki because Sako provides Suzuki an image processing apparatus for reduce image of an original image and capable of ensuring speedy processing and cost reduction. Therefore, image processing can be performed at a high speed by a general-purpose central processing unit which the operation can perform image processing job efficiently.

Claims 25, 29 and 30 are similarly analyzed as claim 19 above.

4. Claims 2, 4-8, 20, 21, 25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al (U S 6,094,218) and Sako (U S 6,671,394 B1) as applied to claims 1 and 19 above, and further in view of Sakaguchi (U S 5,995,201).

Regarding claim 2, Suzuki and Sako are silent about an apparatus wherein when the aspect size ratio of the first image is out of a predetermined range, said image obtaining means obtains the second image.

In the same field of endeavor, however, Sakaguchi discloses digital print method wherein when the aspect size ratio of the first image is out of a predetermined range, said image obtaining means obtains the second image (column 23, lines 16-22 and column 24, lines 50-67).

Art Unit: 2625

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the step of aspect size of ratio of the first image is out of a predetermined range as taught by Sakaguchi in the system of Suzuki because Sakaguchi provides Suzuki a digital print system capable of easily matching a trimmed image with an image turning device, easily confirming the matching state and easily and correctly performing a trimming job by displaying, together with an image read by image sensor, causing no deterioration of image quality to prints any arbitrary size, capable of obtaining fine image quality through image processing effected using a minimum possible electronic magnification, having high reproducing accuracy of the film originals to the prints and having high productivity by solving the problems.

Regarding claim 4, Suzuki and Sako are silent about discloses a digital print method wherein said reducing means reduces the second image obtained by said image obtaining means at a same reduction ratio in both vertical and lateral directions of the second image.

In the same field of endeavor, however, Sakaguchi discloses reducing the second image obtained by said image obtaining means at a same reduction ratio in both vertical (column 10, lines 29-33) and lateral directions of the second image (column 15, lines 25-56 and 43-47).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the step of reducing ratio in both vertical and lateral directions of the second image as taught by Sakaguchi in the system of Suzuki because Sakaguchi provides Suzuki a digital print system capable of easily matching a trimmed

Art Unit: 2625

image with an image turning device, easily confirming the matching state and easily and correctly performing a trimming job by displaying, together with an image read by image sensor, causing no deterioration of image quality to prints any arbitrary size, capable of obtaining fine image quality through image processing effected using a minimum possible electronic magnification, having high reproducing accuracy of the film originals to the prints and having high productivity by solving the problems.

Regarding claim 5, Suzuki and Sako are silent discloses an apparatus further comprising adding means for adding specific information to an arbitrary end section of the reduced image obtained by said reducing means.

In the same field of endeavor, however, Sakaguchi discloses adding specific information to an arbitrary end section of the reduced image obtained by said reducing means (column 16, lines 5-10; column 9, lines 20-30 and column 10, lines 45-56).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the step of adding specific information to an arbitrary end section of reduced image as taught by Sakaguchi in the system of Suzuki because Sakaguchi provides Suzuki a digital print system capable of easily matching a trimmed image with an image turning device, easily confirming the matching state and easily and correctly performing a trimming job by displaying, together with an image read by image sensor, causing no deterioration of image quality to prints any arbitrary size, capable of obtaining fine image quality through image processing effected using a minimum possible electronic magnification, having high reproducing accuracy of the film originals to the prints and having high productivity by solving the problems.

Art Unit: 2625

Regarding claim 6, Suzuki and Sako are silent discloses an apparatus wherein said reducing means obtains the reduced image such that the reduced image to which the specific information was added by said adding means goes in an image frame of a predetermined size.

In the same field of endeavor, however, Sakaguchi discloses specific information was added by said adding means goes in an image frame of a predetermined size (column 14, lines 12-26 and 58-64).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the step of reducing image such that the reduced image to which the specific information was added by said adding means goes in an image frame of a predetermined size as taught by Sakaguchi in the system of Suzuki because Sakaguchi provides Suzuki a digital print system capable of easily matching a trimmed image with an image turning device, easily confirming the matching state and easily and correctly performing a trimming job by displaying, together with an image read by image sensor, causing no deterioration of image quality to prints any arbitrary size, capable of obtaining fine image quality through image processing effected using a minimum possible electronic magnification, having high reproducing accuracy of the film originals to the prints and having high productivity by solving the problems.

Regarding claim 7, Suzuki and Sako are silent discloses an apparatus wherein said adding means adds the specific information to both end sections in the longitudinal direction between the vertical and lateral directions of said reduced image.

Art Unit: 2625

In the same field of endeavor, however, Sakaguchi discloses the specific information to both end sections in the longitudinal direction (column 15, lines 25-36) between the vertical (column 10, lines 29-33) and lateral directions of the reduced image (column 15, lines 25-36).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the step of adding the specific information to both end sections in the longitudinal direction between the vertical and lateral directions of the reduced image as taught by Sakaguchi in the system of Suzuki because Sakaguchi provides Suzuki a digital print system capable of easily matching a trimmed image with an image turning device, easily confirming the matching state and easily and correctly performing a trimming job by displaying, together with an image read by image sensor, causing no deterioration of image quality to prints any arbitrary size, capable of obtaining fine image quality through image processing effected using a minimum possible electronic magnification, having high reproducing accuracy of the film originals to the prints and having high productivity by solving the problems.

Regarding claim 8, Suzuki and Sako are silent discloses an apparatus wherein said adding means uses a reduced image to which the specific information was added as an image for display.

In the same field of endeavor, however, Sakaguchi discloses specific information was added as an image for display (column 16, lines 5-10).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the step of specific information was added as an image for

display as taught by Sakaguchi in the system of Suzuki because Sakaguchi provides Suzuki a digital print system capable of easily matching a trimmed image with an image turning device, easily confirming the matching state and easily and correctly performing a trimming job by displaying, together with an image read by image sensor, causing no deterioration of image quality to prints any arbitrary size, capable of obtaining fine image quality through image processing effected using a minimum possible electronic magnification, having high reproducing accuracy of the film originals to the prints and having high productivity by solving the problems.

Claim 20, is similarly analyzed as claim 2 above.

Claim 21, is similarly analyzed as claim 4 above.

Claim 26, is similarly analyzed as claim 7 above.

Claim 27, is similarly analyzed as claim 5 above.

6. Claims 22, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al (U S 6,094,218) and Sako (U S 6,671,349 B1) as applied to claim 19 above, and further in view of Miyaza (U S 5,424,853).

Regarding claim 22, Suzuki and Sako are silent about a method wherein specific marks are added to one or a plurality of upper, lower, right, and left positions of the reduced image of the aspect ratio of the second predetermined value.

In the same field (image processing apparatus) of endeavor, however, Miyaza discloses image processing apparatus wherein specific marks are added to one or a plurality of upper, lower, right, and left positions of the reduced image of the aspect ratio of the second predetermined value (column 7, lines 27-37 and column 23, lines 30-47).

Art Unit: 2625

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use specific marks are added to one or a plurality of upper, lower, right, and left positions of said reduced image of the aspect ratio of said second predetermined value as taught by Miyaza in the system of Suzuki because Miyaza provides an image processing apparatus with respect to processes of enlargement and reduction, since a conventional digital copying machine is capable of only enlarging or reducing a whole image, the function is low in spite of the advantage of any easy process for image data, therefore, an image processing apparatus such as copying machine, scanner printers is hoped to be developed so as to have a function which can solve problems.

Regarding claim 23, Suzuki and Sako are silent discloses a method wherein said specific marks are added to both ends in the longitudinal direction of said reduced image of the aspect ratio of said second predetermined value.

In the same field (image processing apparatus) of endeavor, however, Miyaza discloses reduced image of the aspect ratio of said second predetermined value (Column 7, lines 26-37).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the step of specific marks are added to both ends in the longitudinal direction of said reduced image of the aspect ratio of said second predetermined value as taught by Miyaza in the system of Suzuki because Miyaza provides an image processing apparatus with respect to processes of enlargement and reduction, since a conventional digital copying machine is capable of only enlarging or

Art Unit: 2625

reducing a whole image, the function is low in spite of the advantage of any easy process for image data, therefore, an image processing apparatus such as copying machine, scanner printers is hoped to be developed so as to have a function which can solve problems.

Regarding claim 24, Suzuki and Sako are silent discloses a method wherein in said generating step, the reduced image to which said specific marks were added is used as a reduced image for display.

In the same field (image processing apparatus) of endeavor, however, Miyaza discloses added is used as a reduced image for display (column 24, lines 5-14).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the step of specific marks were added is used as a reduced image for display as taught by Miyaza in the system of Suzuki because Miyaza provides an image processing apparatus with respect to processes of enlargement and reduction, since a conventional digital copying machine is capable of only enlarging or reducing a whole image, the function is low in spite of the advantage of any easy process for image data, therefore, an image processing apparatus such as copying machine, scanner printers is hoped to be developed so as to have a function which can solve problems.

Allowable Subject Matter

7. The following is an Examiner's statement of reasons for allowance.

Art Unit: 2625

The prior art of record fails to teach or suggest, synthesizing means for synthesizing the second and third images to obtain a synthesized image in combination into other features and elements of claim 9.

8. Claims 9- 17 are allowed.

9. Claim 28 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Other prior art Cited

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kagawa (U S 5,195,174) discloses image data processing apparatus capable of composing one image from a plurality of images.

Matsuura et al (U S 5,231,679) disclose image processing apparatus and image reducing circuit therefor.

Iyoda et al (U S 5,515,181) disclose image reading apparatus providing high quality images through synthesis of segmented image data.

Muramatsu (U S 5,553,201) discloses digital image processing device for automatically selecting one of plurality of different image enlarging/reducing manners.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

12. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to ABOLFAZL TABATABAI whose telephone number is (703) 306-5917.

The Examiner can normally be reached on Monday through Friday from 9:30 a.m. to 7:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's supervisor, Mehta Bhavesh M, can be reached at (703) 308-5246. The fax phone number for organization where this application or proceeding is assigned is (703) 872-9306.

Art Unit: 2625

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

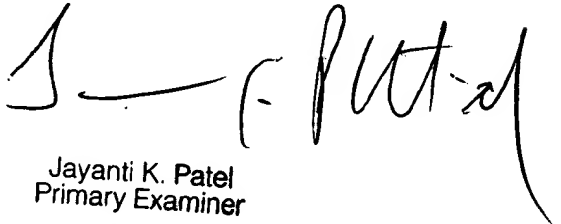
For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Abolfazl Tabatabai

Patent Examiner

Group Art Unit 2625

May 14, 2004



Jayanti K. Patel
Primary Examiner